Analysis: MRF Limited

drvijaymalik.com/2017/04/analysis-mrf-limited-equity-research-report.html

www.drvijaymalik.com has a dedicated section for investment & stock specific queries of readers: “**Ask Your Queries**”. Over time, readers have asked queries about multiple stocks in this section. Answers to these queries have been done post preliminary analysis of the stocks under consideration. Such analysis has been found helpful by readers.

“Analysis” series is an attempt to summarize & share with all the readers, the key questions and their answers, which have featured on “**Ask Your Queries**” section. The primary aim of this new feature is to share the knowledge with all the readers of the website.

The current section of this series, “Q&A” covers **MRF Limited**, the market leader in the Indian tyre industry having one of the most recognized brands in the industry.

Reader’s Query

Dear Dr. Vijay,

I have learnt a lot from your articles and analysis that you share with investors through your website. I have tried to do a bit of analysis on MRF Limited vs rest of tyre manufacturers in India. It would be great if you could spare some time to analyse it further and share your inputs.

For analysis, I have used your recommended steps and the model and tried to do some justice with it.

Look forward to your inputs.

Regards

Anirudh Mahanot

MRF LTD

Mkt Cap – ₹25,680 cr (April 13, 2017)

MRF Limited started as a balloon rubber factory in Madras (now Chennai) in 1946, moved on to making latex cast toys and contraceptives in 1949. Started manufacturing tread rubber in 1952 and by 1956 was the market leader with 50% of market share. Became a public company in 1961 and started exporting to US (world’s largest Tyre manufacturer and exporter). Also, set up an in-house research unit in the 1960s, 2nd plant in 1970, 3rd in 1971 and 4th in 1972. In 1973 became the first company to manufacture nylon passenger car tyres commercially. It started manufacturing truck tyres in 1978 and became the country’s largest selling truck tyres in a couple of years. 1985 – It launched tyres for two wheelers. In 1989 collaborated with Hasbro International USA and launched FUNSKOOL India. In the same year also entered in collaboration with Vapocure Australia to manufacture PU (polyurethane) paint formulations. 2007 touched the T.O of $1bn, doubled it within 4 Yrs to $2bn (2011)

In parallel worked on association with sports (cricket, boxing and car racing & rallies) and built a strong brand over years. Won JD Power Award 12 times in 16 years => brand with Quality + Recognition.

Current Products/ Businesses: Tyres, Sports (bats, kit), Funskool (toys), Paints & Coats, and Pre-treads.

Subsidiaries: MRF Corp Ltd, MRF International Ltd, MRF Lanka P Ltd, and MRF SG PTE Ltd

Financial Analysis

1) Analysis of Profit and Loss Statement (P&L):

Sales Growth and Profitability

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)	CAGR (10yrs)
Sales (A)	3,724	4,407	5,042	5,664	7,453	9,743	11,870	12,131	13,198	20,244	21%
Operating Profit (B)	231	434	406	682	829	809	1,261	1,767	1,928	4,306	34%
Operating Profit Margin (OPM %) (B/A)	6%	10%	8%	12%	11%	8%	11%	15%	15%	21%	
Net profit after tax (PAT) (C')	80	172	145	253	354	619	572	802	898	2,328	40%
Net Profit Margin (NPM %) (C/A)	2%	4%	3%	4%	5%	6%	5%	7%	7%	11%	

MRF has increased its sales at a healthy rate of 21% p.a. It has been able to grow its operating profit margin (OPM) from 6% to 21% and Net profit margin (NPM) from 2% to 11% over last 10 years.

Tax Rate

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Tax%	20%	34%	32%	37%	34%	31%	31%	35%	33%	32%

The company has been consistently paying taxes over years.

2) Analysis of Balance Sheet

Debt to Equity Ratio (D/E)

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Total Debt (D)	729	835	1,249	672	1,354	1,600	1,708	1,599	1,903	2,065
Total Equity (E)	824	986	1,121	1,361	1,691	2,298	2,858	3,645	4,518	6,794
Debt to Equity ratio (D/E)	0.9	0.8	1.1	0.5	0.8	0.7	0.6	0.4	0.4	0.3

D/E ratio has been maintained at comfortable levels, currently at 0.3

Interest Coverage

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Operating Profit	231	434	406	682	829	809	1,261	1,767	1,928	4,306
Interest outgo		94	125	115	122	177	198	198	210	238
Interest Coverage (OP/Int. Out)		4.6	3.2	5.9	6.8	4.6	6.4	8.9	9.2	**18.1**

MRF has been maintaining its leverage within comfortable levels of serviceability. Interest coverage ratio has been good => sign of a healthy company

Other Balance Sheet Parameters:

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Net Fixed Assets (NFA)	650	657	867	934	1,329	1,971	2,914	2,970	3,429	4,594
Capital Work in Progress (CWIP)	66	243	444	285	498	1,042	415	359	627	1,058
Share Capital	4	4	4	4	4	4	4	4	4	4
Dividend Paid (Div) Without DDT	8	8	8	11	21	11	11	13	21	42
Dividend Payout (Div/PAT)	11%	5%	6%	4%	6%	2%	2%	2%	2%	2%
Retained Earnings (RE=PAT-Div)	71	163	136	242	333	609	562	789	877	**2,285**
Price to earning	19.3	8.5	12.3	3.6	8.5	4.7	8.2	6.6	10.4	6.5
Mcap	1,544	1,455	1,775	905	2,994	2,883	4,667	5,284	9,381	15,194
Cash + Investments (CI +NCI)	124	145	171	208	118	129	486	1,237	1,796	2,870

Wealth Creation Assessment:

It is expected that the company should at least create a wealth of INR 1 in market capitalization for its shareholders for every INR 1 of earnings retained by it. Higher the value created, the better.

- Total Retained Earnings (RE) in 10 Yrs (A): 6,068
- Total Increase in Market Cap (B): 19,557
- **Value Created per INR of RE (B/A): 3.22**

3) Analysis of Cash Flow statements:

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Cash from Operating Activity (CFO)	275	306	269	847	158	634	1,023	1,476	1,687	3,408
Cash from Investing Activity (CFI)	-227	-335	-566	-232	-786	-1,111	-966	-937	-1,785	-3,406
Cash from Financing Activity (CFF)	-41	49	326	-657	614	486	-51	-313	67	-179
Net Cash Flow (CFO+CFI+CFF)	7	20	29	-42	-15	9	5	226	-31	-178
Cash & Eq. at the end of year	53	73	102	60	45	56	61	331	708	80

MRF has been consistently growing cash flows from operations (CFO) and used it to for capital expenditures (CFI), dividend to shareholders and repayment of Debt (CFF).

Cumulative PAT vs Cumulative CFO

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)	Total
Net profit after tax (PAT) (C')	80	172	145	253	354	619	572	802	898	2,328	6,223
Other Income (O)	63	29	41	34	29	430	32	29	65	185	938
Interest (I)	49	49	66	69	63	98	159	196	232	346	1,327
Adjusted Profit (C-O+I)	66	192	170	288	388	288	699	969	1,064	2,489	6,612
Cash from Operating Activity (CFO)	275	306	269	847	158	634	1,023	1,476	1,687	3,408	10,082

Higher the CFO, the better! CFO is consistently greater than PAT and signifies that cash collections aren't getting stuck in working capital .

Capex and Free Cash Flow (FCF)

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)	Total
Cash from Operating Activity (CFO)	275	306	269	847	158	634	1,023	1,476	1,687	3,408	10,082
Capex (NFA+WIP change+Dep)		337	580	158	869	1,435	616	373	1,150	2,332	7,849
										FCF	**2,233**

FCF = CFO – Capex = INR 2,233cr

FCF/CFO = 22% => 22% of the cash flow from operations is available to shareholders in last 10 years. Higher the ratio, better it is.

SG to capex =Sales Growth over last 10 years/proportion of CFO used as Capital Expenditure.

Higher the Ratio, better it is. During comparison among companies, the higher SG to Capex ratio identifies companies which show higher sales growth while having low capital expenditure requirements.

- **SG/Capex: 0.27**

4) Return Ratios:

	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Self-Sustainable Growth Rate (SSGR)				0%	3%	12%	16%	17%	14%	22%
PBT/Avg. NFA (<10 %,> 25%)		40%	28%	44%	47%	54%	34%	42%	42%	85%
ROE on Avg Equity (<7%,>25%)		19%	14%	20%	23%	31%	22%	25%	22%	41%
ROCE (EBIT on Avg CE/TA) (<10%,>35%)		13%	9%	15%	18%	19%	15%	18%	17%	33%
Incremental ROE 3Yr Rolling				47%	34%	67%	27%	30%	14%	79%

SSGR:

SSGR higher than the sales growth rate is desirable. Represents the debt-free self-sustainable growth rate potential of a company. It has been observed that companies growing at a higher rate than SSGR are using more resources than their inherent operations can produce and therefore, witness increasing debt levels. Similarly, the companies that are growing at a rate less than or equal to SSGR are able to sustain their growth rates without raising debt/see declining debt levels.

- **For MRF Sales Growth (21%) ~ SSGR (22%).**

PBT/Avg. NFA (<10%,>25%):

Higher the ratio, better it is =PBT/average of Net Fixed Assets at the start and the end of the financial year. This is to highlight that if a company is not able to earn at least 10% or Bank FD rate from its fixed assets, then it should ideally sell all its assets and put the amount in a bank fixed deposit and earn a higher return without taking the pains of running a business.

- **For MRF PBT/Avg. NFA has been consistently very good. On an avg > 40%**

ROE on Avg Equity (<7%,>25%):

Higher the ROE, the better. However, always be cautious with the companies with high ROE and high Debt/Equity. In such companies, high leverage is the reason for high ROE, which is not sustainable. If a company isn't able to earn at least 7% post tax from its equity or shareholders' funds, then it should ideally put its entire equity in a bank fixed deposit and earn a higher return without taking the pains of running a business.

- **For MRF, ROE is 41% for Mar'16 and has been above 20% for last 8 yrs.**

ROCE:

Higher the ROCE, the better = EBIT/average of total assets at the start and the end of the financial year.

- **For MRF, ROCE is 33% for Mar'16 and has been above 15% for last 8 yrs.**

Incremental ROE 3Yr Rolling:

Represents the incremental returns/profits generated by the earnings retained by the company over any consecutive three year's period. Represents the efficiency of utilization of incremental money being deployed by the company management in its operations. Ideally, incremental ROE 3 years rolling should be stable or improve.

- For MRF, this has been fluctuating in alternate periods. 09, 11, 13 and 2016 have been better than 10, 12, 14 period respectively.

5) Operating Efficiency Ratios:

INR Crores	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)
Net Fixed Asset Turnover (High is better)		6.75	6.62	6.29	6.59	5.90	4.86	4.12	4.13	5.05
Receivables days (Low is better)		45	42	38	34	40	42	45	45	32
Inventory Turnover (High is better)		7	6	7	8	7	7	7	7	11

Conclusion:

After analysis of financials of MRF for last 10 years (2007-16), we realize that it is growing at a healthy growth rate with growing profitability margins. MRF has been able to increase its sale by capacity expansion without overly leveraging its balance sheet, as it has been using cash generating from operations to pay off its lenders. The company is in a comfortable debt-servicing situation, which is reflected by its healthy interest coverage ratio. MRF has also improved its NFAT turnover, Inventory turnover and reduced receivable days => Sign of a healthy company

Further Reading: **How to do Financial Analysis of a Company**

BUSINESS ANALYSIS

Comparison with Peers:

S.No.	Name	Promoter holding	Mkt Cap (INR, Cr)	Sales Growth (CAGR, 10yrs)	PAT Growth (CAGR, 10yrs)	D/E	P/E	PEG	Int Cov Ratio	Wealth Creation (Mkt cap/RE)	FCF/ CFO	SG/ CAPEX	SSGR	PBT/AVG NFA	NFAT T.O.	Inv T.O.	Rec Days	Remu to key man/ PAT
1	**MRF Ltd.**	**27.53%**	**21835**	**21%**	**45%**	**0.3**	**14.2**	**0.31**	**18.1**	**3.22**	**22%**	**0.27**	**22%**	**85%**	**5.05**	**11**	**32**	**2.8%**

2	Apollo Tyres Ltd	44%	9388	12%	28%	0.2	8.4	0.42	12.8	1.47	32%	0.17	12%	34%	2.57	6	32	
3	**Balkrishna Ind**	**58.30%**	**11803**	**16%**	**24%**	**0.7**	**16.1**	**0.68**	**3.4**	**3.98**	**5%**	**0.16**	**13%**	**32%**	**1.23**	**10**	**65**	**10.7%**
4	CEAT	50.76%	4678	11%	31%	0.3	11.6	0.15	9.3	3.1	29%	0.16	13%	37%	3.19	9	41	1.2%
5	JK Tyre & Ind	52.34%	2735	9%	42%	1.8	8.6	0.2	3.1	2.26	1%	0.1	3%	21%	2.07	8	77	14%
6	**TVS Srichakra**	**45.36%**	**3022**	**19%**	**47%**	**0.3**	**13.3**	**0.36**	**16**	**5.79**	**46%**	**0.36**	**21%**	**91%**	**6.55**	**10**	**30**	**9.2%**
7	Goodyear India	74%	1651	9%	12%	**0**	13.1	1.27	NA	2.77	59%	0.21	23%	82%	7.59	14	28	7.0%

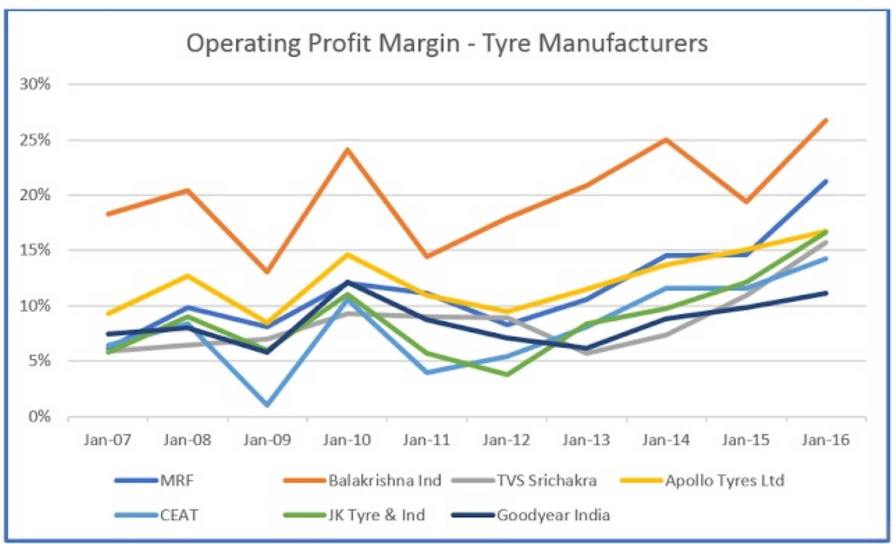
When we compare MRF with 6 other prominent Tyre players in India, we see that only Balkrishna Industries and TVS Srichakra qualify for Sales Growth (CAGR, 10yr) > 15% and therefore we analyse and compare these two companies (BI & TVS) further on various key parameters

Promoter Holding:

MRF's promoters hold only 27.53% vs BI (58.3%) and TVS (45.36%). **Preferred zone > 50%.**

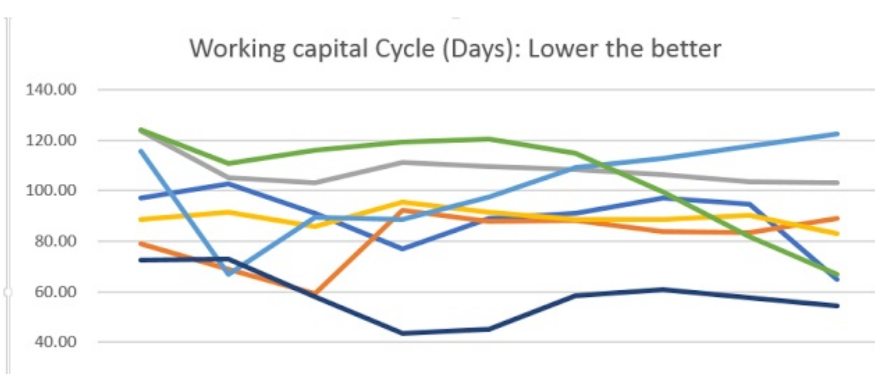
Sales Growth (10yr CAGR):

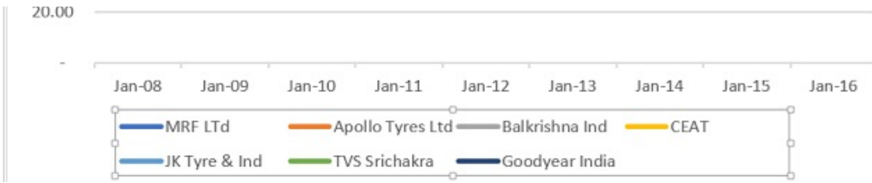
MRF has been the fastest growing among the peer set with TVS being a close second (19%) and then BI (16%). However, OPM has been best for BI as compared to the other tyre manufacturers. Between MRF and TVS, MRF has improved its OPM from 6% to 21% in last 10 yrs and has been above 15% for last 3 yrs while TVS last 3 yr. avg OPM ~ 11%, lowest among the 3 entities. Refer OPM chart below



Operating Efficiency:

When we compare these 3 companies on PBT/ Avg NFA, NFAT turnover, Inventory turnover and receivable days, TVS is the most efficient in using its fixed assets with MRF as a close second. However, BI's receivable days of 65 is almost double of MRF and TVS and NFAT T.O is just $1/4^{th}$ of the two.





Further Reading: **How to do Business Analysis of a Company**

Valuation Analysis

Margin of Safety:

- **Earnings Yield:** Last 10 yr. avg P/E for tyre manufacturers has been in the band of 7.5 to 9 (avg P/E ~ 8) while currently MRF (~14), TVS (12.9) and BI (17.33) are currently providing earnings yield of 7%, 7.5% and 6.2% respectively
- **Free Cash flow (FCF/CFO):** TVS (46%), MRF (22%) and BI (5%)
- **Self-Sustainable Growth rate (SSGR):**
  - **MRF:** SSGR 22%: Sales Growth 21%
  - **TVS:** SSGR 21%: Sales Growth 19%
  - **BI:** SSGR 13%: Sales Growth 16%

Margin of safety is highest in TVS with FCF/CFO (46%), SSGR (21%) vs Sales growth (19%) and Earnings Yield (7.5%, P/E 12.9) while BI has a very poor margin of safety (FCF/CFO – 5%, SSGR -13%, EY 6.2%)

P/E to growth Ratio (PEG):

PEG for MRF (0.31) and TVS (0.36) are both in desirable range and shows that there’s healthy growth which is cheaply available in the market.

Conclusion:

After doing the business analysis and valuation analysis and when compared with the competition, we figure out that MRF has been the fastest growing tyre manufacturer in India and reasonably priced, a company which has improving profitability margins and decreasing working capital cycle.

We also conclude to stay clear of BI for following reasons: Poor Margin of safety (Very low FCF and SSGR), poor operating efficiency (growing working capital cycle, lowest NFAT T.O. in the industry), low interest coverage ratio and very high remuneration to Directors and Key managerial personnel (**10.7% of NPAT**, will cover this in Management analysis below)

Further Reading: **How to do Valuation Analysis of a Company**

Management Analysis

Background check of Promoters and Directors: (Source Reuters)

- **Mr. Arun Mammen** is the Managing Director, Executive Director of MRF Ltd. After graduating from the University of Madras went to the USA and obtained his MBA degree from the University of Ashland, USA. During his stay in the USA, he had training from M/s BE Goodrich Tire & Co. and Uniroyal Goodrich Tire & Co. who were the tyre manufacturers in the world. In 1990, Mr. Mammen became Whole-time Director of MRF Ltd. He is presently Managing Director of the Company. Besides MRF, he is also a Director of Funskool [India] Ltd, a toy manufacturing Company. He was also associated with their American collaborators Milton Bradley International and Hasbro Inc., who are the world leaders in educational and scientific toys. (Annual Compensation: 2.33cr)
- **Mr. Rahul Mammen Mappillai** is the Whole-time Director of MRF Ltd. Mr. Rahul Mammen Mappillai is B.A. (Hons) Economics from St. Stephens College, Delhi. After his graduation, he completed his M.A. in Economics from the University of Madras and subsequently did his Master in Business Administration (MBA) at the University of Michigan Business School, Ann Arbor, USA. He joined the Company as Corporate Manager - Planning & Development in 2003 and was subsequently promoted to General Manager - Planning & Development in 2005. He became Vice-president - Planning & Development in 2008. He has experience in all departments such as Planning, Production, Finance and Project Execution of the Company. As Head of the Corporate Planning Department, he had a role in formulating the long-term business plan of the Company and other new initiatives such as Balance Score Card and the Performance Management Systems. He is overseeing the finance and project functions. He was instrumental in completing the Ankenpally project at Medak District, Andhra Pradesh in a record time. He is overseeing the automation and process upgradation in all new projects of the Company. (Annual Compensation 58.97L)

Management Succession Plans:

The second generation (Rahul Mammen) is already part of the Top Management and involved in the business since 2003. Detailed education and experience profile mentioned above

Salary being paid to Potential Successor:

Rahul Mammen (Whole time director and overseeing Finance, Automation and Process upgradation) with 15 years of work-ex in MRF is paid 58.9L p.a. (0.02% of PAT) is very reasonable.

Salary of Promoters & Key managerial personnel vs Net Profits:

Name	Promoter holding	Remu to key man/ PAT	PAT 2015	PAT 2016	% change in PAT	Remu to Key Man 2015 (cr)	Remu to Key Man 2016 (cr)	% change in Remu
MRF Ltd	**27.53%**	**2.8%**	**1590**	**2328**	**46%**	**49.5**	**66.9**	35%
Balkrishna Ind	58.30%	**10.7%**	489	568	**16%**	57.38	60.57	6%
TVS Srichakra	**45.36%**	**9.2%**	**104**	**197**	**89%**	**9.5**	**18.09**	89%

Remuneration to Promoters, Directors and Key Managerial Personnel is quite high for BI (10.7%) and TVS (9.2%) as compared to industry avg (6%) and MRF's 2.8% (Overall Ceiling as per the Company Act 2013 is 11%). The %change however for all the 3 have been in line or less than the % growth in profit over the previous year.

Project Execution Skills:

Successful execution of increase in production capacity especially by greenfield/brownfield plants is a good indicator of competent management. It is very good if the capacity addition has been done without facing any delays.

MRF has a total of 9 manufacturing units across India and has grown its production capacity along with its Turnover year on year. Has Won JD Power Award 12 times in 16 years

Consistent Increase in Dividend Payment

Company	INR, cr	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16	CAGR
MRF Ltd	Div Payout	8	8	8	11	21	11	11	13	21	42	20%
	PAT	80	172	145	253	354	619	572	802	898	2,328	45%
Balkrishna Ind	Div Payout	20	20	12	14	14	15	15	19	23	53	24%
	PAT	83	106	70	209	186	269	356	488	489	568	11%
TVS Srichakra	Div Payout	2	3	3	8	10	10	6	12	26	46	42%
	PAT	6	9	9	30	39	40	36	47	104	197	47%

MRF has been consistently paying a dividend from its free cash flows and has grown the dividend payout at 20% CAGR => sign of a good management.

Promoter Shareholding:

Preferred companies with Promoter shareholding > 50%, which ensures that management control is with themselves. In MRF promoter shareholding is low at 27.53% => a red flag!!

Promoter buying the shares:

No such incidence in either of 3 companies in recent past (5 yrs)

Conclusion:

After analyzing the management of MRF, we can notice that it has a competent management, which cares about shareholder's interests and believes in company's future. MRF seems to have put in place a succession plan, which would enable the next generation to take over the company. However, a 27.53% promoter holding is a concern.

Further Reading: **How to do Management Analysis of a Company**

From Annual Reports

MRF-Annual Report:

Across the board, there was an overall increase in production in all segments adding up to a 9% increase in total tyre production. During the period under review, the price of natural rubber and the fuel price have softened, resulting in lower raw material cost. Reduction in material cost has been passed on to customers by way of selling price reduction. This has finally resulted in lower top line growth

The increased capacity built up by the various industry players will see heated competition with severe price discounting being the norm and it is critical to protecting your Company's turf in the commercial tyres and the two-wheeler segments which will be under severe pressure.

The long pending issue of inverted tax is yet to be resolved despite the numerous representations made to the Government. The natural rubber import is required to maintain competitiveness in the International market as the gap between natural rubber production and consumption is quite substantial and hence duty concessions should be extended for import of natural rubber and other raw materials. A permanent solution to this has been sought, as it will be very important for the Indian tyre Industry in the long run, though in the current commodity scenario, due to the lower prices of raw materials like rubber and crude oil, this may not have been of immediate critical concern.

Tyre imports into India, mainly in Truck and Bus Radial (TBR) tyres have grown by over 250% during the last 2 years. China's share in the TBR imports is about 90%. This sharp rise in the Imports, if continued, will lead to underutilization of TBR and also Truck and Bus Bias (TBB) capacities.

TVS-Annual Report:

THREAT: Import of two-wheeler tyres is a growing threat and continues to grow YoY. Moreover, foreign players have started creating capacities in India which will be a new threat in the coming financial year. New domestic players are also entering the two-wheeler segment which will make the market even more competitive. **Raw material prices are expected to increase compared to last year** on the back of increased demand although prices hinge on China's economic growth and exchange rate.

COMPETITION: Keeping in mind the highly competitive nature of the industry, there is a continuous struggle by all the players to improve their respective market shares. Cheaper imports from China and South-East Asian countries during the year further added to the competitive pressures faced by the industry, while the threat of foreign players setting up dedicated capacities in India to compete with the domestic players looms large.

Further Reading: **Understanding the Annual Report of a Company**

Indian Tyre Industry (Source ATMA)

An Overview

Key Figures:

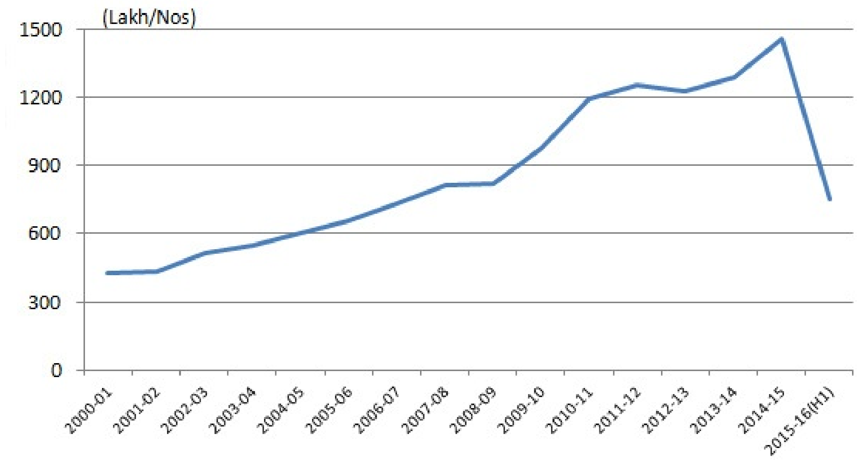
No. of Tyre Companies:	39
No. of Tyre Plants:	60
Industry Turnover 2014-15 (est.):	Rs. 50000 crore (US$ 8.5 Bn)
Exports 2014-15 (est.):	Rs. 10500 crore (US $ 1.7 Bn)

Policy Environment:

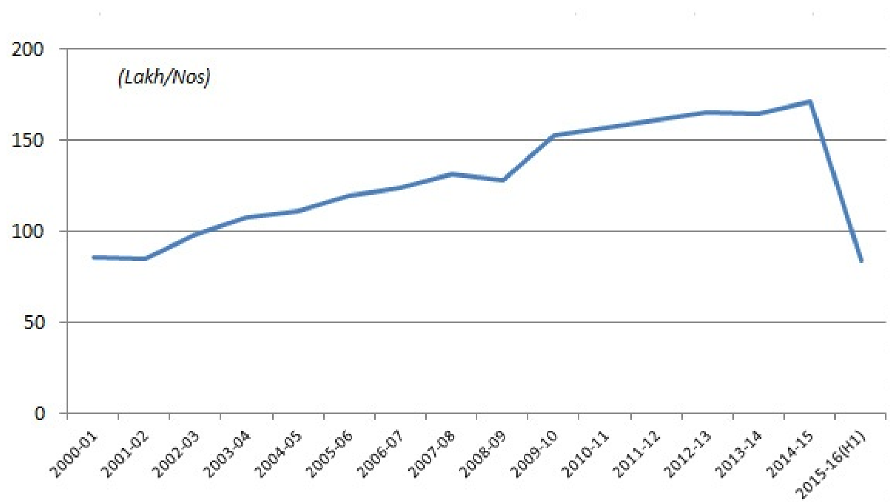
- All categories of tyres can be exported freely.
- **All categories of new tyres can be imported freely.** No WTO Bound Rates for tyres and tubes.
- Imports of Second hand/Retreaded tyres (major categories) is restricted under EXIM Policy and can be done with an import license.
- Tyres imports under Regional Trade Agreements (Asia Pacific Trade Agreement, Indo-Sri Lanka, SAFTA, India-Singapore, ASEAN, India-Malaysia etc.) allowed at preferential rates of import duty.
- **All tyre industry related raw materials can be imported freely** (under OGL).
- Tyre Industry delicensed in September, 1989.
- **Natural Rubber (NR) principal raw material of Tyre Industry, is in the 'Negative List` (i.e. not eligible for any concession in Custom duty) under various Trade Agreements**, i.e. India-ASEAN Free Trade Agreement, India-Sri Lanka Free Trade Agreement, South Asian Free Trade Agreement (SAFTA), India-Malaysia Comprehensive Economic Cooperation Agreement (CECA), India-Singapore Comprehensive Economic Cooperation Agreement and India-South Korea Comprehensive Economic Partnership Agreement (CEPA).

Production & Export Trend (Source ATMA)

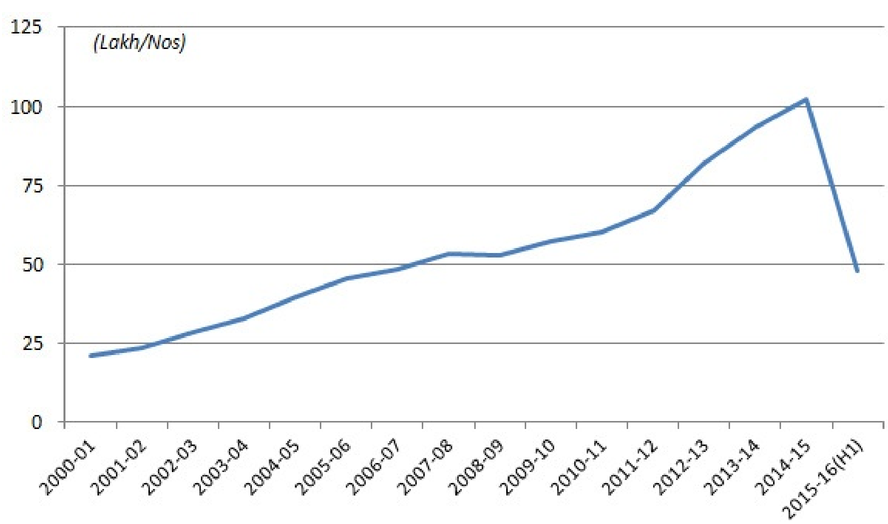
Total Tyre Production in India:



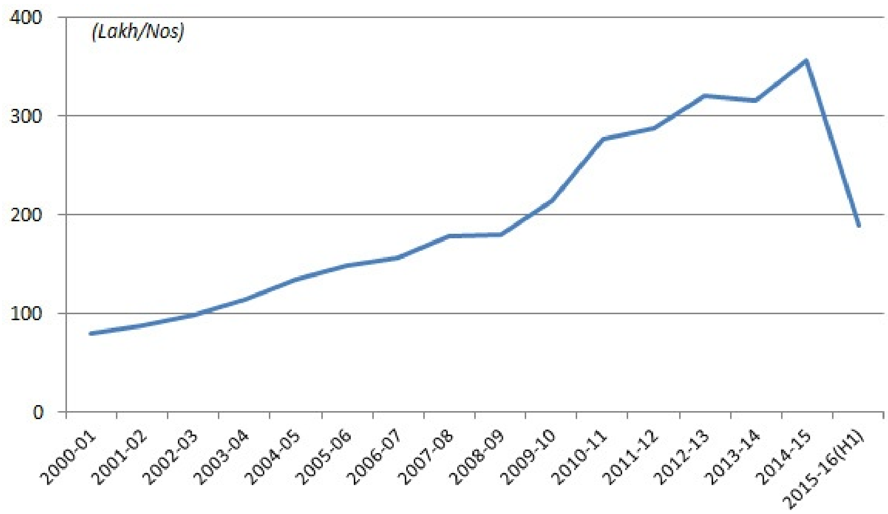
Truck & Bus Tyre Production



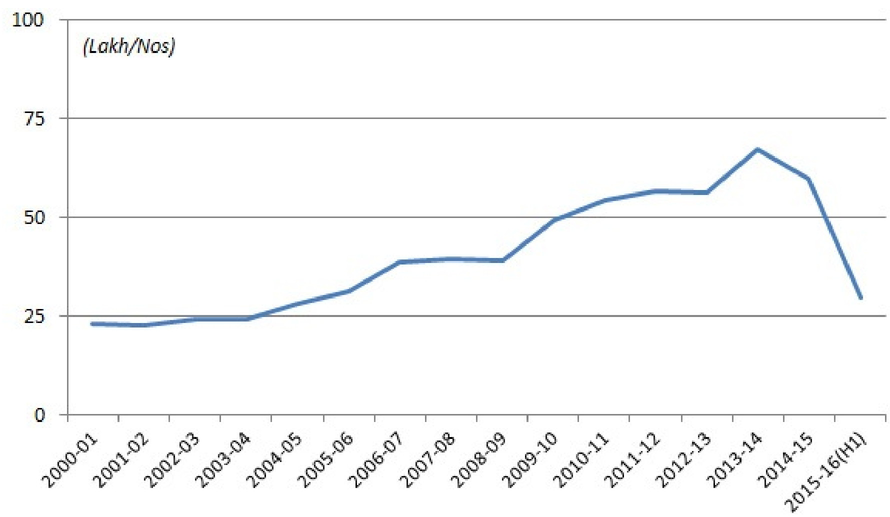
LCV Tyre Production



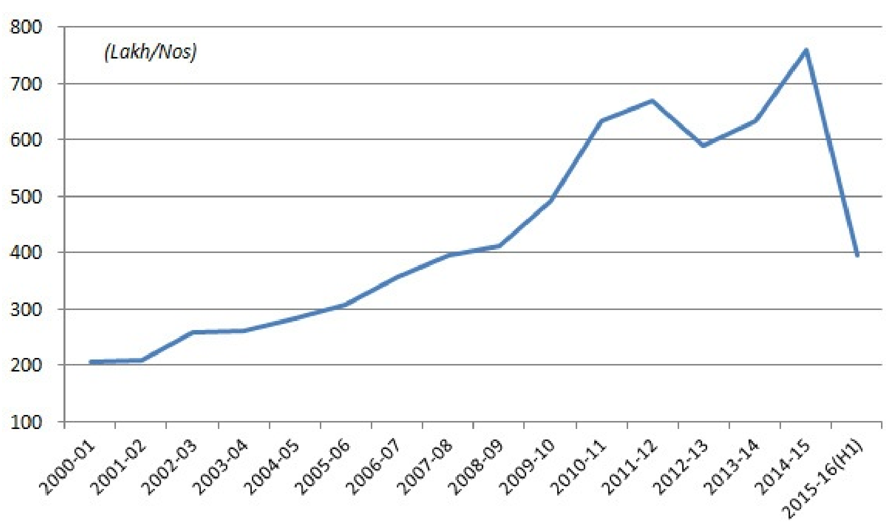
Passenger Car (Incl. Jeep) Tyre Production



Farm/Tractor (Incl. Front, Rear and Trailer) Tyre Production



2/3 Wheeler Tyre Production



Source: http://atmaindia.org/production-export-trend.html

Industry Conclusion:

Tyre industry in India is very competitive with about 40 players and more international players setting up capacities here. With imports from China growing to the tune of 250% in last couple of years the situation for domestic players worsens and pressure on profitability margin increases. With Rubber and Crude as the key raw material for the industry, duty concessions on rubber imports and crude price movements remain key concerns and variable impacting the profitability for the manufacturers. Also, tyre industry depends largely on the domestic as well global economic situation (Passenger, LCV, CV, Agri etc.) as can be seen from the above charts…across industry there was a drop of 40-50% production due to global uncertainty and drop in demand.

Look forward to your inputs.

Regards

Anirudh Mahanot

Author's Response

Hi Anirudh,

We appreciate the hard work you have put to prepare this report on MRF Limited. The report is useful for any investor who wishes to analyse MRF Limited. I thank you on behalf of all the readers of www.drvijaymalik.com for the time & effort put by you.

We notice that while analysing MRF Limited, you have used standalone financials of the company. We prefer to analyse consolidated financials while doing an analysis of the company. This is because consolidated financials represent the position of the complete business operations of any company irrespective of it having multiple subsidiaries, joint ventures, lines of business etc. The consolidated financials represent the whole pie whose stake every single share held by the investor represents.

Therefore, while providing our inputs, we have analysed the consolidated financials of MRF Limited.

While analysing the annual report for FY2016 (18 months: Oct 2014 - March 2016), page 112, an investor would notice that in the case of MRF Limited, the share of the business in the standalone entity (MRF Limited) is very large in overall operations. MRF Limited (standalone) has 99% of total group assets and contributes to 98.08% of total group profits.

g) Additional information on Net Assets and Share of Profit as at 31st March, 2016

Name of the entity	Net Assets, i.e., (total assets minus total liabilities)		Share in profit or loss	
	As % of consolidated net assets	Amount (₹ Crore)	As % of net Profit	Amount (₹ Crore)
Parent				
MRF Ltd.	99.00	6,787.41	98.08	2,320.60
Parent Subsidiaries				
Indian				
MRF Corp Ltd.	0.49	33.40	0.61	14.52
MRF International Ltd.	0.02	1.42	0.01	0.15
Foreign				
MRF Lanka (P) Ltd.	0.07	5.06	0.14	3.42
MRF SG Pte. Ltd.	0.42	28.47	1.15	27.31
Minority Interest				
Indian Subsidiary	-	0.12	-	0.01

Therefore, even while analysing the standalone financials an investor might not be way off the mark while understanding the group position. However, it is always advised that investors give more importance to consolidated financials over standalone financials during the assessment of any company. Even in the case of MRF Limited, at March 31, 2016, the standalone entity has a total debt of ₹2,065 cr. whereas at the consolidated level the group has a total debt of ₹2,463 cr. Therefore, while analysing only the standalone financials, an investor may miss out on about ₹400 cr. debt, which is taken by the subsidiaries of MRF Limited. Missing out on such critical information would impair the parameters like debt to equity, interest coverage etc. and may present potential negative surprises for the investor in future.

Read further: **Q&A: Consolidated vs Standalone Financials, Buyback, Bonus Shares**

Investors need to focus on another key aspect while analysing the financial performance of MRF Limited. This is related to the duration of the period, which is reported by MRF Limited in 2016.

Up to Sept 2014, MRF Limited used to report its financial performance from October to September every year. Therefore, when the Companies Act 2013 mandated that all the companies should align their financial year to April to March, MRF Limited had to change its reporting month from September earlier to March presently.

As a result, the financial performance reported by MRF Limited in 2016 is the business performance during the 18 months from October 2014 to March 2016. This presents a peculiar issue while comparing the business performance of the MRF Limited year on year from its past reported performance. This is because the previous sales/profit numbers are for 12 months whereas the 2016 numbers are for 18 months.

If this fact is ignored by the investors, then it is highly probable that investors would make the following errors:

1. The sales and profit growth would seem higher as sales/profits in 18 months period would be comparatively higher
2. Turnover ratios like fixed asset turnover ratio, inventory turnover ratio etc. would seem higher as the assets/inventory figures at the year-end are to compare with sales of 12 months instead of 18 months, which is the case of MRF Limited 2016.
3. Receivables days would seem lower as in the case of MRF Limited 2016, the account receivables at the year-end are being compared with 18 months of sales instead of 12 months of sales in normal practice.
4. Higher fixed asset turnover ratio as explained above would give a picture of better asset utilization by the company than the reality.
5. Higher turnover ratio and lower receivables days, as explained above, would give a picture of better working capital utilization by the company than the reality.

Therefore, it is essential that while analysing the performance of MRF Limited and comparing it with previous years, an investor adjusts the reported numbers of 2016 to reflect 12 months performance instead of 18 months presented by the company.

While analysing the standalone financial performance, this exercise is relatively simple as the investors have the standalone financial results of last 4 quarters available in the public domain and the revenue/profits etc. for the 12 months period can easily be deduced from them. However, as the company does not disclose its consolidated financial results in its quarterly updates, therefore, it becomes essential for investors to use some approximations to arrive at the comparable consolidated performance for 12 months period.

We have used the simple approximation of reducing the 18 months of reported consolidated performance to 12 months by multiplying it with (2/3). The resultant consolidated sales figure is ₹13,695 cr, which is slightly higher than the reported standalone sales of ₹13,400 cr. by MRF Limited during April 2015 – March 2016 as taken from the quarterly results. This is in-line with the fact that MRF Limited has about 99% of the business within its parent standalone entity.

With this background, we would start to analyse the past financial performance of MRF Limited over last 10 years.

(₹ Crores/10 Millions) MRF LTD (Consolidated)

Narration	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)	Mar-16 (12months) = 18months*2/3	Total 10 Yrs (Sept 2006 - March 2016)
Sales	3,724	4,409	5,046	5,668	7,459	9,752	11,967	12,248	13,330	20,542	13,695	
Operating Profit	231	433	406	681	834	810	1,272	1,780	1,943	4,365	2,910	
Operating Profit Margin (OPM%)	**6%**	**10%**	**8%**	**12%**	**11%**	**8%**	**11%**	**15%**	**15%**	**21%**	**21%**	
Other Income	63	29	41	34	29	429	32	25	66	187	125	
EBITDA	294	463	447	716	863	1,239	1,304	1,805	2,009	4,552	3,035	
Interest	49	49	66	69	63	98	159	196	232	352	234	**1,333**
Profit before tax (PBT)	99	259	210	396	538	893	843	1,235	1,353	3,463	2,309	
Tax%	20%	34%	32%	37%	34%	31%	31%	35%	33%	32%	32%	
Net profit after tax (PAT)	79	170	143	251	358	619	579	809	908	2,366.0	1,577	**6,282**
Net Profit Margin (NPM%)	**2%**	**4%**	**3%**	**4%**	**5%**	**6%**	**5%**	**7%**	**7%**	**12%**	**12%**	
Cash from Operating Activity (CFO)	275	306	270	847	158	634	1,034	1,499	1,699	3,042		**9,765**
Capex (NFA+WIP change+Dep)		**337**	**581**	**158**	**869**	**1,435**	**621**	**373**	**1,154**	**2,341**		7,868
											FCF	**1,897**
Self-Sustainable Growth Rate (SSGR)				**0%**	**3%**	**11%**	**16%**	**17%**	**15%**	**23%**	**20%**	
Net Fixed Asset Turnover (High is better)		6.71	6.60	6.28	6.58	5.90	4.89	4.16	4.16	5.11	3.40	
Receivables days (Low is better)		45	42	38	34	39	42	45	45	32	47	
Inventory Turnover (High is better)		7.0	6.0	6.9	8.5	7.4	7.5	7.0	7.3	11.0	7.4	
Working capital cycle (Rec + Inv Days)		97	103	91	77	89	91	97	95	65	97	
Net Fixed Assets (NFA)	654	660	870	936	1,331	1,973	2,919	2,974	3,436	4,608		
Capital Work in Progress (CWIP)	66	243	444	285	498	1,042	415	359	628	1,059		
Share Capital	4	4	4.2	4.2	4.2	4.2	4	4	4.2	4.2		
Dividend Paid (Div) Without DDT	8	8	8	11	21	11	11	13	21	42	**155**	
Dividend Payout (Div/PAT)	11%	5%	6%	4%	6%	2%	2%	2%	2%	2%		
Retained Earnings (RE=PAT-Div)	71	162	135	240	336	608	569	796	887	2,324	**6,128**	
Price to earning	19.5	8.5	12.4	3.6	8.4	4.7	8.1	6.5	10.3	6.4		
Cash + Investments (CI +NCI)	119	141	167	205	119	130	494	1,241	1,809	2,904		
Total Debt (D)	**729**	**835**	**1,249**	**672**	**1,354**	**1,600**	**1,708**	**1,599**	**1,903**	**2,463**		
Total Equity (E)	824	984	1,117	1,356	1,688	2,294	2,861	3,655	4,540	6,856		
Debt to Equity ratio (D/E)	**0.9**	**0.8**	**1.1**	**0.5**	**0.8**	**0.7**	**0.6**	**0.4**	**0.4**	**0.4**		
Cost of funds	**12.0%**											
Interest outgo (Rs. Cr.)		94	125	115	122	177	198	198	210	262	262	
Interest Coverage (OP/Int. Out)		4.6	3.2	5.9	6.9	4.6	6.4	9.0	9.2	16.7	11.1	

	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10	Sep-11	Sep-12	Sep-13	Sep-14	Mar-16 (18 months)		Total 10 Yrs (Sept 2006 - March 2016)
Cash from Operating Activity (CFO)	**275**	**306**	**270**	**847**	**158**	**634**	**1,034**	**1,499**	**1,699**	**3,042**		**9,765**
Cash from Investing Activity (CFI)	-227	-335	-567	-232	-786	-1,111	-977	-959	-1,791	-3,413		**-10,398**
Cash from Financing Activity (CFF)	-41	49	326	-657	614	486	-51	-313	67	215		**697**
Net Cash Flow (CFO+CFI+CFF)	7	20	29	-42	-14	9	6	228	-24	-156		**64**
Cash & Eq. at the end of year	54	74	103	60	46	57	65	337	728	126		

Total Retained Earnings (RE) in 10 Yrs (A)	6,128
Total increase in Mcap in 10 yrs (B)	23,821
Value created per INR of RE (B/A)	**3.89**

Source: Screener

MRF Limited has been growing its sales since last 10 years (FY2006-16) at a moderate pace of about 15% year on year. This growth rate has been associated with a consistent increase in the production capacity of the company over the years.

As per the credit rating agency ICRA's credit rationales for MRF Limited, the production capacity has increased from 31.7 million tyres per year in 2011 to 53.4 million tyres in 2016. Such growth in sales along with consistent growth in volumes is essential for sustained business performance. This is because any growth, which is resultant of only price increase without an increase in sales volumes is bound to witness competition from substitute products.

Moreover, as per ICRA 2016 credit rating rationale, the production capacities are currently nearly fully utilized.

> MRF's financial risk profile is strong with a sizeable networth of Rs. 68.6 billion, cash and liquid investments of Rs. 29.0 billion and comfortable capitalization and coverage indicators as on March 31, 2016. Over the years, the accruals were largely reinvested in the business towards capacity expansion and brand promotion purposes. Steady fall in raw material prices in the last two years coupled with operational synergies arising from cost control measures, near-full utilization of capacities and better absorption of fixed costs supported MRF's profitability indicators. The consolidated operating and net margins stood at 22.0% and 11.5% for the 18 month period ending March 2016 against 15.1% and 6.8% respectively reported during the period, September 2013 to October 2014. MRF has been investing steadily towards capacity additions in the last few years with a capital expenditure (capex) of over Rs. 53.4 billion during the period, October 2010 to March 2016. With only portion of the capex being debt funded and further supported by strong cash accruals, MRF's capitalisation indicators are comfortable with a net gearing of 0.11x. On the coverage front, the interest coverage ratio and net debt to OPBDITA stood satisfactory at 12.85x and 0.16x respectively as on March 31, 2016. Over the medium term, MRF is estimated to spend ~Rs.10.0-12.0 billion on an annual basis towards ramping up of its capacities.

Further Reading: **7 Important Reasons Why Every Stock Investor Should Read Credit Rating Reports**

Full utilization of existing capacities necessitates that the company would have to do additional capex for generating incremental production capacity to support future growth.

An analysis of the 2016 annual report, page 85, reflects that MRF Limited has additional land in Gujarat, which it has provided as a security/mortgage for the debentures raised by it.

p. Terms of Repayment and Security Description of Long Term Borrowings:

i) ECB from The Bank of Tokyo - Mitsubishi UFJ, Ltd. availed in December, 2011-USD 40 Million is secured by a first charge on Plant and Machinery situated at Puduchery Unit. Interest is payable at a rate equal to the 6 months BBA LIBOR plus margin of 1.55% (Previous year 6 months BBA LIBOR plus margin of 1.55%) payable half-yearly. The said loan is fully hedged and is repayable in three equal annual instalments at the end of the fourth, fifth and sixth year beginning October, 2015.

ii) The principal amount of Debentures, interest, remuneration to Debenture Trustees and all other costs, charges and expenses payable by the company in respect of Debentures are secured by way of a legal mortgage of Company's land at Gujarat and hypothecation by way of a first charge on Plant and Machinery at the company's plants at Perambalur, near Trichy, Tamil Nadu, equivalent to the outstanding amount.

Further Reading: **Understanding the Annual Report of a Company**

This can be one of the many land parcels that the company might have in its possession. However, it reflects that the company might have spare land with it, which can be used for future expansion. An investor may get clarification from the company about whether this land parcel is industrial/commercial or residential in nature so that further clarity on its usage can be ascertained.

At March 31, 2016, the company had in its possession cash & investment of about ₹2,904 cr at the consolidated level. At September 30, 2016, MRF Limited in its standalone half year results declared a cash & investments position of ₹3,880 cr.

Rs.Crore

Standalone Statement of Assets and Liabilities	As at 30.09.2016
Particulars	Unaudited
ASSETS	
(1) Non-Current Assets	
(a) Property, Plant and Equipment	4,953.26
(b) Capital Work-in-Progress	945.58
(c) Other Intangible Assets	12.34
(d) Financial Assets	
(i) Investments	1,452.65
(ii) Loans	21.23
(iii) Others financial assets	13.78
(e) Other non-current assets	238.70
(2) Current Assets	
(a) Inventories	1,819.10
(b) Financial Assets	
(i) Investments	1,857.16
(ii) Trade Receivables	1,926.27
(iii) Cash and cash Equivalents	571.14
(iv)Bank balances other than (iii) above	1.38
(v) Others financial assets	5.64
(c) Other current assets	189.93

Total cash + financial investments = ₹3,880.95 Cr

The presence of spare land along with cash at hand presents a strong combination for the company that it has resources ready at its hand to go for further capex and support its growth in future.

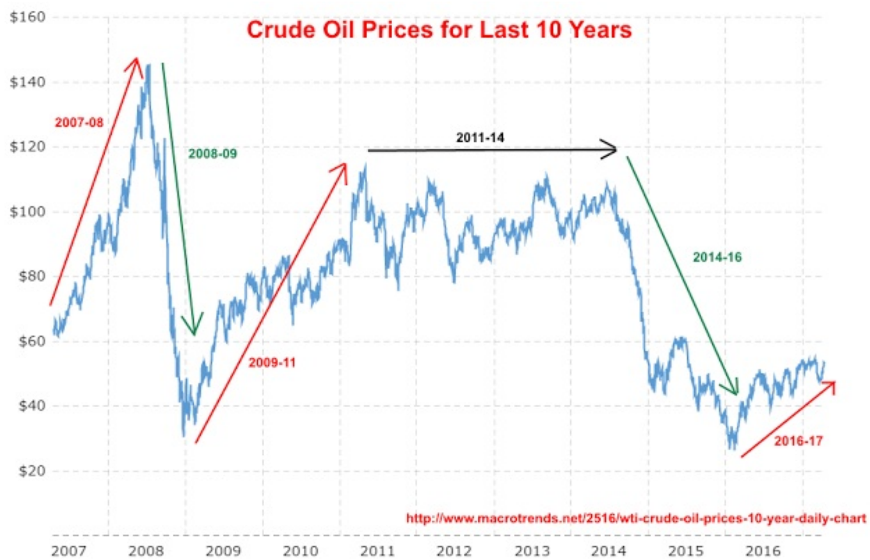
An investor would appreciate that the availability of resources needs a competent management, which is able to execute and complete projects. MRF Limited has a history of executing projects. It currently has 9 plants out of which it has completed 3 plants in 2011 [7th Plant at Ankanpally (A.P), 8th plant in Trichy (TN)] and 2012 [9th plant in Trichy (TN)], (as per the company website>Who We Are>Milestones).

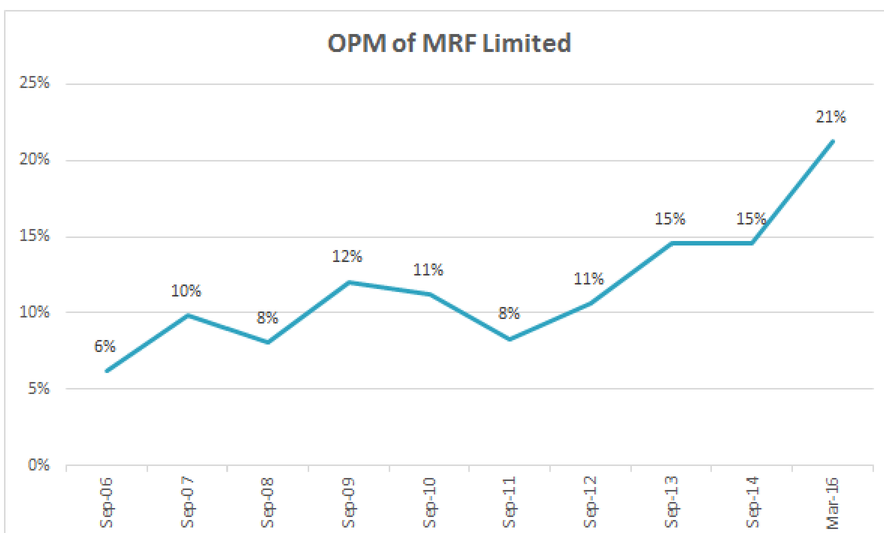
A combination of land, cash and experienced management bodes well for the company that it can execute future capacity additions with success.

The growth rate achieved by MRF Limited in the past has been associated with fluctuating profitability margins. The operating profitability margin (OPM) of the company has been varying 8% to 10% in a cyclical manner from 2007 to 2012 and has been increasing since then. Currently, the OPM has increased from 11% in 2012 to 21% in 2016. Such improvement in the operating margins is a commendable performance for any company and it deserves further analysis.

The key raw materials for MRF Limited are rubber and crude derivatives (various chemicals). It would be very helpful for the investor to see the operating margins of MRF Limited in association with the prices of natural rubber and crude oil prices.

The below charts captures the movement of natural rubber prices, crude oil prices and the OPM of MRF Limited over last 10 years (2007- now):





An investor would notice the following phases of the prices movement in the natural rubber, crude oil and their association with the OPM of MRF Limited:

Period	Natural Rubber Prices	Crude Oil Prices	OPM of MRF Limited (Consolidated)
2007-2008	Increased	Increased	Decreased from 10% to 8%
2008-2009	Decreased	Decreased	Increased from 8% to 12%

2009-2011	Increased	Increased	Decreased from 12% to 8%
2011-2016	Decreased	2011-2014: Stable	Increased from 8% to 21%
		2014-2016: Decreased	
2016-2017	Increased	Increased	OPM (standalone) has declined from 24% in June 2016 quarter to 18% in Dec 2016 quarter (see below)

Operating profitability margin for MRF Limited (standalone) for recent quarters:

(₹ Crores/10 Millions) MRF LTD (Standalone)

Narration	Jun-16	Sep-16	Dec-16
Sales	3,482	3,249	3,176
Expenses	2,642	2,593	2,610
Operating Profit	840	657	566
OPM	24%	20%	18%

The above tables clearly reflect that the operating margins of MRF Limited are vulnerable to the movement in the raw material prices. This is the pattern, which is reflective of any commodity business, which finds it difficult to pass on the fluctuations in the raw material prices to its end consumers.

While reading the credit rating reports and the annual report of MRF Limited, at multiple places we found references to the ability of MRF Limited to pass on the prices of an increase in raw material to its end consumers. For example:

ICRA Credit Rating Rationale (May 2011):

> The rating also consider the tyre industry's vulnerability to cyclical trends in auto industry, vulnerability of profit margins to the commodity price cycles, especially that of natural rubber (constituting over 40% of total raw material costs). While MRF has been able to pass on the rise in input costs to the end customers through periodical price hikes in the past, the company's ability to fully pass on the same to the customers with minimal time lag, in the wake of recent sharp rise in natural rubber prices remains to be seen. This in tandem with the intensifying competition from the domestic incumbents and foreign entrants, are likely to compress the Company's margins going forward. Further, large influx of industry wide capacities (~50% additional capacities to be commercialized by 2012-13) is likely to restrict the pricing flexibility of all players, including MRF. While the capacity additions of MRF will meet the growing demand for auto industry and creates balance in the product mix with large additions taking place in radial segment, these large debt funded capital expenditure is likely to result in compression in profitability (RoCE) metrics and moderation of capital structure and leverage ratios.

ICRA Credit Rating Rationale (June 2012):

> The rating re-affirmation considers the Company's consistent track record of operations despite a challenging business environment during the last two years, MRF's large scale of operations, its competitive positioning, strong brand loyalty and dominant market share across different segments. MRF's product portfolio is fairly diversified, with equal share of business from the cyclical commercial truck and bus (T&B) segment and the relatively stable non-commercial segment comprising off-road, two wheeler and passenger vehicle segment. Compared to competing tyre manufacturers, MRF derives higher than average share of revenues from the replacement market (at ~70%) which tends to be less cyclical than Original Equipment (OE) demand and allows for greater pricing flexibility. MRF also enjoys stable and healthy relationships with all major domestic OEMs, which is likely to support future volumes given the expected long term healthy demand outlook for the auto industry. The ratings also consider the strong financial profile of the Company, characterized by consistent growth in revenues and profits over years and comfortable cash flows.

Further Reading: **7 Important Reasons Why Every Stock Investor Should Read Credit Rating Reports**

Annual report 2016, page 15, Board's Report:

> **Performance Overview**
>
> During the 18 months period ended 31st March, 2016, your Company's total income increased to ₹ 22,706 crore from ₹ 14,714 crore in the previous 12 months period ended 30th September,2014. Across the board, there was an overall increase in production in all segments adding up to a 9% increase in total tyre production. During the period under review, the price of natural rubber and the fuel price have softened, resulting in lower raw material cost. Reduction in material cost has been passed on to customers by way of selling price reduction. This has finally resulted in lower top line growth. This apart, your Company could

The above statements might give an impression to the reader that MRF Limited has been working in a business environment where it can pass on the increase as well as a decrease in raw material cost to its customers and thereby maintain its profitability margins. However, as reflected by the above comparative analysis of the OPM of MRF Limited with natural rubber and the crude oil prices, it clearly comes out that the OPM is highly susceptible to the changes in the raw material prices.

The fluctuating OPM should indicate to the investor that the recent increase in the OPM to 21% (2016) might not be sustainable in future. This fact is established by observing the recent decline in the standalone OPM of MRF Limited from 24% in June 2016 quarter to 18% in Dec 2016 quarter. This period has been associated with an increase in prices of both the key raw materials viz: natural rubber and crude oil derivatives.

Fluctuating OPM is a characteristic of commodity businesses, which have products that are not much differentiated from their competitors. Tyres are such a product, where unless and until a customer has very specific requirements of usage, the tyres from any of the competitors might also serve the purpose with acceptable performance.

Similar to the fluctuating pattern of the operating profitability margin, the net profit margin (NPM) of MRF Limited has also witnessed similar cyclical fluctuations over the years with NPM varying from 2% to 6% during 2006-2012 and then increasing to 12% in 2016. In the FY2017, the net standalone NPM has declined from 14% in June 2016 quarter to 9% in Dec 2016 quarter.

Therefore, we believe that all the marketing expense that MRF Limited is incurring (₹358 cr. standalone in 18 months ended March 2016), is leading to more awareness of the brand and higher volume sales but is not resulting in the pricing power in the hand of the company. Its margins are still susceptible to the fluctuating raw material prices due to competitive pressures.

The company has acknowledged the intense competitive environment in which it operates and has communicated the same to the shareholders in the communication from the Chairman (2016 annual report, page 3):

> *Dear Shareholder,*
>
> *With the change in our financial year, we have had an extended financial period from October 2014 to March 2016. This period was indeed challenging with the Automobile sector recording a lacklustre performance. This was compounded by increased tyre production capacity being added by major players. This scenario was further aggravated by significant import of Chinese truck radial tyres at prices far below those of domestic manufacturers thereby impacting the industry.*

Further Reading: **Understanding the Annual Report of a Company**

Significant capacity addition by existing domestic players, dedicated capacities for Indian market by MNC players and the cheap imports of tyres (90% from China) are some of the key factors, which will always put pressure on the profitability margins of MRF Limited and the high OPM enjoyed by the company might not be sustained in future years. Therefore, it is advised that investor should keep a close watch on the movement of the operating profitability margins of MRF Limited in future.

Over the years, MRF Limited has been paying its taxes at a rate, which is near the standard corporate tax rate applicable in India, which is a good sign.

Further Reading: **How to do Financial Analysis of a Company**

While assessing the sales/profit growth performance, an investor had to keep in mind that the reported performance by MRF Limited in 2016 is for 18 month period and had to adjust it to 12 months period to compare it with previous years. In a similar manner, the investor needs to adjust the data to arrive at the operating efficiency parameters for MRF Limited for 2016 as well.

After adjustment, an investor would notice that the net fixed asset turnover ratio (NFAT) of MRF Limited has been declining since 2010 from 6.58 to 3.40 in 2016. The decline in the initial years up to 2012 can be assigned to the newly added capacities of 7^{th}, 8^{th} and 9^{th} plant commissioned in 2011 and 2012, which would take some time to generate sales at full capacity to lead to improved turnover. However, the consistent decline in the NFAT in the recent years from 4.16 in 2014 to 3.40 to 2016 (adjusted for 12 months) needs proper attention by the investor.

It is to be noted by the investor that in recent years (from 2012 when the 9^{th} plant was commissioned), the company does not seem to have constructed any new plant. Therefore, apparently, the capex since 2012 including ₹2,341 cr. in 2016 (18 months) and ₹240 cr. in H1-FY2017 seems to be going in the existing plants.

Such large capital investment leading to lower NFAT indicate that with time the operations of the company are becoming more & more capital intensive, where the company has to consistently invest to develop new products, invest in plants to improve technology and at the same time cannot enjoy stable profitability margin due to more of a commodity product and cheaper imports.

The credit rating report of ICRA for March 2015 highlight the capital-intensive nature of the business of MRF Limited and other limited parameters:

> The rating, however, remains constrained by the susceptibility of tyre demand to the cyclicality in automotive industry even as MRF's diversified product profile partially mitigates the risk. Due to weak OEM and export demand in the last two years, MRF's sales growth remained subdued during SY2013 and SY2014. However with the prices of natural rubber (NR) remaining low, MRF's operating profit margins reached the highs of 15% during SY2013 and SY2014. That said, the Company's margins remain vulnerable to the volatility in raw material prices; notably that of natural rubber, synthetic rubber and oil derivatives. Operating in a highly capital intensive business necessitates steady re-investments in the business. MRF has sizeable capital expenditure plans towards ramping up of its capacities. With the industry currently going through a period of cyclical oversupply and rising imports, the Company's pricing flexibility is expected to be under pressure. Going forward, MRF's strong replacement presence and healthy relationship with major domestic OEMs is expected to support the volumes while the profit margins will remain vulnerable to the movement in raw material prices. Stability in profitability and debt indicators on the back of cyclical auto demand and the proposed large capex plans will be critical credit monitorables.

An investor needs to keep a close watch on the net fixed asset turnover of MRF Limited. The company has enjoyed high profitability margins over last 5 years (2011-16) on account of declining natural rubber prices and crude oil prices. These profitability margins may not be sustainable in the long term. The impact of increasing rubber and crude oil prices in FY2017 is already visible in the declining profitability margins of the company in the current financial year.

The high profitability margins in the recent years have helped the company to fund most of its capex through the cash generated from operations and thereby keep its debt levels in check and at the same time build up significant cash reserves. During 2012-2016, MRF Limited generated cash from operations (CFO) of ₹7,276 cr. whereas it spent ₹4,489 cr in capital expenditure, which has helped the company to generated cash reserves of about ₹2,900 cr at March 31, 2016.

As a result, in 2016, the company has witnessed improvement in its credit rating by ICRA from AA+ to AAA, which is the best credit rating possible for any corporate.

MRF Limited

Instrument	Amount (Rs. Crore[1])	Rating Action
Non Convertible Debenture (NCD)	500.0	[ICRA]AAA (Stable) / upgraded from [ICRA]AA+ (Stable)
NCD – Proposed	100.0	[ICRA]AAA (Stable) / upgraded from [ICRA]AA+ (Stable)

However, it seems that the business of MRF Limited will require significant investments going ahead in terms of new capacity additions to support growth, investment in existing plants to maintain/improve their production processes, R&D and branding. Whereas the times of high margins might not sustain for long, which would lead to the company using more cash than what it generates like in the past during 2006-2011.

During 2007-2011, MRF Limited did a capital expenditure of ₹3,379 cr. whereas it generated a CFO of ₹2,215 cr. during the same period. As a result, the company has to rely on debt to fund its capex needs. The debt of MRF Limited increased from ₹729 cr. in 2006 to ₹1,600 cr in 2011.

The major reason for discussing the period-wise CFO and capex data is to highlight to the investors that in cyclical industries, which have commodity type products, an investor should not become very optimistic based on recent good performance in terms of higher profitability and increasing cash reserves. As the cycle of raw material prices turns against the company, the consistent high capex requirements along with declining profitability margins would eat into the cash reserves of the company.

That's why it become essential for investors to analyse the past financial performance data of companies for preferably last 10 years to understand the business dynamics of the company.

Further Reading: **5 Simple Steps to Analyse Operating Performance of Companies**

When an investor analyses the inventory turnover ratio (ITR) of MRF Limited, then she would observe that the ITR has been stable at levels of 7-8 over the years. Stable ITR indicates an acceptable level of inventory management during the growth phase without letting inventory eat up into the funds.

However, the receivables days of MRF Limited have increased from 34 days in 2010 to 47 days in 2016 (adjusted for 12 months). Such deterioration in the receivables days indicates that MRF Limited has to give attractive credit periods to its dealers/customers etc. in order to compete against other players and cheaper imports.

Overall, the working capital management of MRF Limited has been at a sustained level of about 90-95 days over the years indicating that the company has been able to keep its working capital under control despite witnessing significant growth over recent years.

The same observation also gets established when an investor compares cumulative profit after tax (PAT) of MRF Limited over 2006-2016 with the cumulative cash from operations (CFO) during the same period. Over FY2006-16, MRF Limited reported a cumulative PAT of ₹6,282 cr. whereas over the same period, the company had the cumulative CFO of ₹9,765 cr. It indicates that MRF Limited has been able to manage its working capital over the years.

However, as mentioned above, the intense competition in the sector may also have an impact on the working capital position of the company in terms of obsolete inventory, the requirement to have higher stock/SKUs (stock keeping units) of a larger variety of tyres, higher credit period to customers/dealers etc. Therefore, it is advised that investors should keep a close watch on the working capital performance of MRF Limited going ahead.

Further Reading: **How to Monitor Stocks in your Portfolio**

Self-Sustainable Growth Rate (SSGR):

The investor would notice that MRF Limited has an SSGR of about 15-20% over the years, which is matching the sales growth rate of 15-17% being achieved by the company in the past.

Further Reading: **Self Sustainable Growth Rate: a measure of Inherent Growth Potential of a Company**

Upon reading the SSGR article, an investor would appreciate that SSGR being higher than the achieved sales growth indicates that the company can sustain its current sales growth from its internal sources without relying on the fund's infusion from outside in terms of debt or equity.

Over 2006-16, MRF Limited has witnessed its sales increase from ₹3,724 cr. in 2006 to ₹13,695 cr. (2016, 12 months adjusted). To achieve this sales growth, though a look at the debt numbers would indicate that the company has to raise debt as the total debt figure has gone up from ₹729 cr. in 2006 to ₹2,463 cr in 2016, a net increase of ₹1,734 cr. However, when an investor looks at the cash & investments available with the company, then she notices that the cash and investments of MRF Limited have increased by ₹2,785 cr. from ₹119 cr. in 2006 to ₹2,904 cr. in 2016.

The above analysis indicates that MRF Limited has been able to meet all its operational and capital expenditure requirements from its internal sources and that all the incremental debt raised by the company is effectively available as cash & investment balance with the company.

This assessment of SSGR gets substantiated when the investor analyses the free cash flow (FCF) position of MRF Limited.

An investor would notice that MRF Limited has generated ₹9,765 cr. from cash flow from operations (CFO) over 2006-16 whereas it has spent ₹7,868 cr as capital expenditure over the same period resulting in a free cash flow (FCF) of ₹1,897 cr. Moreover, the company has utilized the free cash to pay dividends to shareholders of about ₹155 cr.

SSGR and FCF are two of the main pillars of assessing the margin of safety in the business model of any company.

Further Reading: **3 Simple Ways to Assess "Margin of Safety": The Cornerstone of Stock Investing**

Such performance has been taken positively by the market and the market has rewarded the company and its shareholders handsomely over the past years.

The company could achieve an increase in market capitalization of about ₹23,821 cr. over 2006-16 versus the earnings retained and not distributed to shareholders of about ₹6,128 cr. indicating that a market value of about ₹3.89 has been created by the company for its shareholders for each ₹1 of earnings retained by it over the years.

Upon analysis of MRF Limited, the investor notices multiple other aspects, which deserve attention:

1) Errors in the Annual Report:

While analysing the 2016 annual report, an investor would notice that the calculations of the figures provided by MRF Limited in the section "Indebtedness" at page 35, do not tally.

V INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment (₹ Crore)

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtness as on 01.10.2014				
i) Principal Amount	1455.87	411.48	35.42	1902.77
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	36.78	9.01	0.39	46.18
Total (i + ii + iii)	1492.65	420.49	35.81	1948.95
Change in Indebtedness during the period ended 31.03.2016				
Additions	213.70	541.08	3.16	757.94
Reduction	(544.72)	(19.21)	(31.40)	(595.33)
Net Change	(331.02)	521.87	(28.24)	162.61
Indebtness as on 31.03.2016				
i) Principal Amount	1124.85	933.35	7.18	2065.38
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	49.35	21.78	0.14	71.27
Total (i + ii + iii)	1174.20	955.13	7.32	2136.65
	1492.65-331.02 =1161.63	420.49+521.87 =942.36	35.81-28.24 =7.57	1948.95+162.61=2111.56 1161.63+942.36+7.57=2111.56

VI) REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

The debt data provided for the start of the period and the net change during the period do not sum up to the debt data provided for the end of the year.

The annual report of the largest and reputed player of a key industry is not expected to have such errors. Therefore, it is advised that the investors may ask for clarity from the company about the data presented in this section of the annual report to rule out whether it is a genuine human error, which the company might want to rectify.

If the number presented in the "Indebtedness" table are not erroneous, then further clarity may be sought from the company about their correct interpretation.

2) In-House Registrar & Transfer Agent:

As per the 2016 annual report, MRF Limited has an in-house department, which acts as the registrar & transfer agent (RTA) to perform various shareholders related activities like share transfer, dematerialization, re-materialization, dividend distribution etc.

h) **Registrars and Transfer Agents:** In-house Share Transfer
MRF Limited
No. 114, Greams Road,
Chennai - 600 006

In terms of SEBI Circular No. O&CC/FITTC/CIR-15/2002 dated 27th December, 2002, your Company is carrying out both physical transfer work as well as electronic connectivity, in-house.

In-house investor relations department provides various services viz., Dematerialization and Rematerializsation of shares, Share Transfers/Transmissions, Disbursement of dividend, Issue of duplicate share certificates, Dissemination of information and Fixed Deposit related activities.

Further Reading: **Understanding the Annual Report of a Company**

It is expected that as per the best governance practices, the RTA should be an independent outside agency, which can perform all the above-mentioned activities related to shareholders. This is because many times corporates have been accused of indulging in questionable practices when the RTA has been an in-house department. In the past, even large corporate like Reliance have been questioned by SEBI when it had in-house RTA agency: "Reliance Consultancy Services": **Read Here (India Today, 1996)**

Therefore, we believe that as part of best practices, companies should have independent third party agencies as RTAs.

3) Related Party Transactions (Purchases from promoters' entities):

2016 annual report of MRF Limited indicates that the company has purchased material worth about ₹240 cr. from companies/entities where the directors of the company are interested parties.

iv) Companies in which Directors are related:

Purchase of Raw Materials / Components / Machinery	: Coastal Rubber Equipments Pvt. Ltd - ₹ 101.78 Crore, Devon Machines Pvt. Ltd - ₹ 28.37 Crore, Braga Industries - ₹ 107.10 Crore and Others - ₹ 3.00 Crore **₹240 cr.**
Selling & Distribution Expenses	: Funskool (India) Ltd - ₹ 1.06 Crore.
Payment towards Services	: VPC Freight Forwarders Pvt. Ltd - ₹ 13.66 Crore, Coastal Rubber Equipments Pvt Ltd - ₹ 1.67 Crore and Braga Industries LLP - ₹ 0.01 Crore
Sale of Investments	: Comprehensive Investments & Finance Co Pvt. Ltd - ₹ 6.10 Crore
Sale of Materials	: Funskool (India) Ltd - ₹ 0.03 Crore.

Such transactions with promoters' entities are key areas which carry the potential of helping smart promoters benefit themselves at the cost of public shareholders.

An investor may analyse these transactions further to assess whether the same are at market prices and also to assess the need for MRF Limited to deal with promoters' entities rather than purchasing these products directly from independent vendors.

Further Reading: **How to do Management Analysis of Companies**

4) Labour/wage issues:

Moreover, as the business of MRF Limited is highly labour driven, it is essential that the company maintain good relationships with its workers. As per the 2016 annual report, the wage settlement with the workers' union at one of their largest plants in Chennai at Thiruvottiyur is pending since long.

Industrial Relations

Overall, the industrial relations in all our manufacturing units had been harmonious as well as cordial, except in Thiruvottiyur unit wherein long-term wage settlement is pending. Efforts are being made to resolve the issue. Both production & productivity were maintained at the desired satisfactory levels throughout the period under review.

The wage issue at Thiruvottiyur unit is a long drawn issue as there are news articles dating back to early 2000's covering the wage issues at this unit.

An investor should keep a close watch on the developments on the labour aspects of the company as any adverse development on this front can impact the company's operations and future growth.

5) Promoters' Shareholding:

The promoters' shareholding in the company is low at 27.52% at Dec 31, 2016. However, if we notice that the promoter's shareholding has been increasing slowly over the years from 25.31% at June 30, 2001. In the Dec 2016 quarter as well, the promoters' shareholding has increased from 27.49% to 27.52%, which is positive factor.

However, an investor would notice that despite low promoters' shareholding, the promoters are well in the control of the company and are running the company's business without any apparent dispute with other large shareholders.

RF Limited is currently available at a P/E ratio of about 17, **which does not offer a margin of safety in the purchase price** as described by Benjamin Graham in his book **The Intelligent Investor.**

However, as seen by the analysis of self-sustainable growth rate (SSGR) and the free cash flow (FCF), MRF Limited has shown that it has a margin of safety in the business model.

Further Reading: **3 Simple Ways to Find Out Margin of Safety in a Stock**

Overall, MRF Limited seems to be a company which has been able to grow well during the past decade and has been able to capitalize on the declining trend in its key raw materials. As a result, the company has been able to improve its profitability margins and generate significant cash surplus in the last few years. However, with the raw material prices on an uptrend since about last one year, it remains to be seen whether MRF Limited is able to sustain its profitability margins.

The company operates in an industry, which is capital intensive and highly competitive necessitating continuous capital expenditure by the company without the ability to maintain its profitability margins. In the past, the company has benefited from the industry tailwinds of lower commodity prices. However, it remains to be seen whether the company is able to retain its balance sheet strength in light of significant capex being done by competitors and cheap import of tyres esp. from China.

The management of the company is experienced in the field and has created a well-known brand in a seemingly commoditized product. The management has grown the company over the years and has brought it to the leading position in the industry by successfully executing the expansion projects in the past. With the apparent availability of land as well as cash at hand, it should not be difficult for the management to execute such project in future as well.

However, the key monitoring factor for any investor in MRF Limited would be to assess the performance of the company when the past tailwinds of favourable raw material prices turn against the company as the commodity cycle turns. Such times would require MRF Limited to continuously do capex when the profitability margins would be falling.

The ability of the management to maintain the balance sheet strength during such times would be the differentiating factor from other players if it is able to do so.

Further Reading: **How to Monitor Stocks in Your Portfolio**

These are our views about MRF Limited. However, you should do your own analysis before taking any investment related decision about MRF Limited.

You may use the following steps to analyse the company: "**How to do Detailed Analysis of a Company**"

Hope it helps!

Regards,

P.S:

- To know about the stocks in my portfolio, their relative composition, cost price, details of the last 10 transaction as well as to get updates about any future buy/sell transaction in my portfolio, you may subscribe to the premium service: **Follow My Portfolio with Latest Buy/Sell Transactions Updates (Premium Service)**
- The financial table in the above analysis has been prepared by using my customized stock analysis excel template which is now compatible with screener.in. This customized excel template is now available for download as a premium feature. For further details and download: **Click Here**
- You may learn more about our stock analysis approach in the e-book: **"Peaceful Investing – A Simple Guide to Hassle-free Stock Investing"**
- You may read "**Selecting Top Stocks to Buy - A Step by Step Process of Finding Multibagger Stocks**" to select fundamentally good stocks for investment.
- I have used the framework described by me in the article "**5 Simple Steps to Analyse Operating Performance of Companies**" to analyze the companies discussed in this article. An investor can use this framework of simple step to analyze any company she wishes to explore.
- I have used the financial data provided by screener.in and the annual reports of the companies mentioned above while conducting analysis for this article.

DISCLAIMER

Registration Status with SEBI:

I am registered with SEBI as an Investment Adviser under SEBI (Investment Advisers) Regulations, 2013

Details of Financial Interest in the Subject Company:

Currently, I do not own stocks of the companies mentioned above in my portfolio.